

Attorney Docket: 074937-0269804

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION of: MOHAN.

Application No.: 09/546,575
Filed: April 10, 2000

Confirmation Number: 3406
Examiner: BOCCIO, Vincent F.
Group Art Unit: 2621

Title: CONVERGENCE-ENABLED DVD AND WEB SYSTEM

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

ATTN: Board of Patent Appeals and Interferences

APPELLANTS' BRIEF (37 C.F.R. §41.37)

Sir:

This paper is further to the Notice of Appeal dated August 17, 2006, for which a supportive brief is due October 17, 2006.

Fees:

The Commissioner is authorized to charge the requisite large entity fee for filing a brief in support of an appeal, and any required fee to Pillsbury Winthrop Shaw Pittman LLP's deposit account no. 033975 (order no. 074937-0269804).

I. REAL PARTY IN INTEREST

The real party in interest in this appeal is the following party: Apple Computer Inc.

II. RELATED APPEALS AND INTERFERENCES

No other appeals or interferences will directly affect, or be directly affected by, or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

A. TOTAL NUMBER OF CLAIMS IN APPLICATION

Claims pending in the application are: **17**

B. STATUS OF ALL THE CLAIMS IN APPLICATION

Claims 1, 3-9, 11-16 and 19-21 are pending in the Application and have been rejected.

Claims 2, 10, 17 and 18 have been cancelled.

C. CLAIMS ON APPEAL

The rejections of claims 1, 3-9, 11-16 and 19-21 are being appealed.

IV. STATUS OF AMENDMENTS

No amendments to the claims were submitted or made in the Application after the final rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

In the present Application, claims 1, 9, 13, and 16 are independent claims. The claims of the present Application are generally directed to enhanced DVD playback systems. In particular, the claims are directed to systems involving DVDs that have been authored to cause a DVD reader to write index information into General Parameter Registers ("GPRMs") during playback, where GPRMs are specified in the DVD Standard. Specification, page 3, lines 1-9. The systems can use the index information to retrieve information, such as a URL, from one of many fields in the TXTDT_MG data structure provided in the DVD Standard. Specification, page 5, lines 12-15. It will be appreciated that the index information in the GPRM can be authored to deliver information in response to a user request where the information is context sensitive. Specification, page 6, line 17 – page 7, line 3.

Claim 1 is directed to a system comprising a DVD unit that plays a DVD and generates information representative of the contents of a DVD and, upon receiving a certain command embedded in the information, writes current position of play within the DVD into one or more GPRMs. Specification, page 5, lines 1-9. In addition to displaying video content extracted from the DVD, the system extracts TXTDT_MG data structures and derives URLs using the GPRMs to index into the TXTDT_MG. Specification, page 5, lines 12-15.

Claim 9 is directed to a system comprising a DVD unit that plays a DVD and, upon receiving a certain embedded command, writes indicia of a current position of play within the DVD into a GPRM. Specification, page 5, lines 1-9. The system also comprises a DVD Text Data parser for parsing a TXTDT_MG data structure in the information to derive data containing a Universal Resource Locator (URL). Specification, page 6, lines 6-16.

Claim 13 is directed to a system comprising a DVD unit that plays a DVD and generates information representative of the contents of a DVD and, upon receiving a certain embedded command, writes indicia of a current position of play within the DVD into the GPRM. Specification, page 5, lines 1-9. The system further comprises a DVD Text Data parser for parsing a DVD Text Data Structure based on content of the GPRM to derive a Universal Resource Locators (URL). Specification, page 6, lines 6-16.

Claim 16 is directed to a system comprising a DVD unit that plays a DVD and, upon receiving a certain embedded command, writes indicia of a current position of play within the DVD into the GPRM. Specification, page 5, lines 1-9. The system further comprises a DVD Text Data parser for deriving a data structure from the DVD and, based on the content of the GPRM, parses the information to derive a plurality of URLs. Specification, page 6, lines 6-16. The system further comprises a media player adapted to display a plurality of buttons, wherein each button is associated with at least one of the plurality of URLs, the association between the each button and the at least one URL being responsive to the positional playback data in the GPRM. Specification, page 6, line 16 – page 7, line 3.

VII. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1, 3-4¹, 6-9, 11, 13-16 and 19-21 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over U.S. Patent No. 6,580,870 to Kanazawa et al. ("Kanazawa") in view of U.S. Patent No. 6,230,295 to Watkins ("Watkins"). Claims 5 and 12 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Kanazawa in view of Watkins" and further in view of U.S. Patent No. 6,173,406 to Wang et al. ("Wang").

At issue in this appeal are the following:

- whether the cited art renders obvious storing URLs in a DVD Text Data Structure, (including the TXTDT_MG data structure);
- whether the cited art renders obvious using information in a GPRM to index a DVD Text Data Structure, (including the TXTDT_MG data structure); and
- whether the cited art renders obvious a DVD Text Data parser.

¹ The Office Action rejection includes cancelled claim 2 and excludes pending claim 3. Appellant presumes that the Examiner intended to reject claim 3 instead of claim 2.

VIII. ARGUMENT

The claim rejections should be reversed because the cited art does not render the claims obvious. A §103(a), or obviousness, rejection is proper only when “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains.” 35 U.S.C. §103(a). The Examiner must make out a *prima facie* case for obviousness. The mere fact that references can be combined or modified is not sufficient to establish *prima facie* obviousness. The *en banc* Federal Circuit has held that “structural similarity between claimed and prior art subject matter, proved by combining references or otherwise, where the prior art gives reason or motivation to make the claimed compositions, creates a *prima facie* case of obviousness.” *In re Dillon*, 16 U.S.P.Q. 2d 1897, 1901 (CAFC 1990). The underlying inquiries into the validity of an obviousness rejection are: “(1) the scope and content of the prior art; (2) the level of ordinary skill in the prior art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence of nonobviousness.” *In re Dembiczak*, 175 F.3d 994, 998, (Fed. Cir. 1999).

Further, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990). Likewise, if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984).

Additionally, with hindsight, a claim of obviousness can be an easy one to make. Many inventions seem obvious with the clarity of 20-20 hindsight. However, a hindsight basis for obviousness is inappropriate and cannot sustain a *prima facie* case of obviousness.

The Cited Art Does Not Render Obvious Storing URLs In A TXTDT_MG Data Structure

The Examiner has not established *prima facie* obviousness with regard to the use of TXTDT_MG Data Structures to store URLs. Structural similarity between claimed and prior art subject matter, proved by combining references or otherwise, where the prior art gives reason or motivation to make the claimed compositions, creates a *prima facie* case of obviousness. *In re Dillon*, 16 U.S.P.Q. 2d at 1901. Appellants respectfully submit that, with regard to the storage of URLs, no structural similarity exists between the claimed invention and the prior art and that, absent an impermissible use of hindsight, no reason or motivation could have existed to combine the cited art as proposed by the Examiner.

In rejecting the claims, the Examiner admits that nothing in the cited art teaches storing URLs in a DVD Text Data Structure as required by the claims of the present invention (specifically, the TXTDT_MG data structure in claims 1, 3-9 and 11-12). Kanazawa teaches button commands embedded in program chain information to specify URLs that are also embedded in the program chain information. Kanazawa, col. 12, lines 42-64. In particular:

The video object set (VOBS) constituting a title includes a large number of video objects called cells (cell #1, cell #2, . . .). Each cell is composed of a large number of video object units, with a navigation pack (NAVI) at the head. That is, the video object units from one navigation pack to the next navigation pack constitute a single cell (or a video object). The navigation pack is included in video data units of one GOP or two GOPs (0.5 sec. to 1 sec). Each navigation pack is management information to control the reproduction of the corresponding video object and is composed of a disk search information (DSI) pack and presentation control information (PCI) pack. The DSI pack is used as search information for the reproduce start address in special playback, such as fast-forward or rewind. The PCI pack is used to change angles in multiangle playback or to display highlight information for executing a navigation command (e.g., a button command) according to the instruction given by the user. In the third embodiment, a URL indicating the HTML contents related to an image of the corresponding video object is embedded in an empty area of a DSI pack or PCI pack.

Kanazawa col. 13, lines 28-48. The video object is an MPEG-2 program stream and has PCI and DSI, video data management information, as a sub-stream. Kanazawa col. 16, lines 1-5. Thus, Kanazawa explicitly teaches embedding URLs in a video stream, and not in a DVD Text Data Structure.

In contrast, the presently claimed invention collects URLs in a DVD Text Data Structure – a hierarchical structure located in a section specifically designated for storage of Text Data by

the DVD Standard. Kanazawa teaches away from the claimed invention by adopting an on-the-fly approach wherein URLs are embedded directly inline with video title content and wherein the URLs are extracted by proximity triggering. Nevertheless, the Examiner proposes that:

Since it is known with respect to DVD having area set [forth] for storing text data, wherein the management area such as TXTDT MG is a well known text data manager and wherein the URL is text, the area defined as TXTDT manager is a data structured area for storing text, wherein Kanazawa stores URL text, the area defined as a manager or managing text being an area, suggests in itself to store text in a manager area for storing text, while Kanazawa already stores the URL being text, therefore, based on the above renders obvious to utilize a manager areas already set forth for text to store any text in that set fourth area, set fourth for text, as is deemed obvious to those skilled in the art.

Office Action mailed May 17, 2006, page 2, paragraph commencing at line 27. In distilled form, the Examiner apparently argues that

- (i) DVDs have text storage areas such as TXTDT_MG,
- (ii) URLs consist of text, and
- (iii) Kanazawa stores text URLs.

Based on these assertions, the Examiner concludes that Kanazawa teaches, suggests or otherwise renders obvious the storage of URLs in TXTDT_MG data structures as claimed by Appellants.

The Examiner's conclusion is erroneously drawn because important structural elements of both Kanazawa and the present application were omitted or ignored. For example, Kanazawa teaches *dispersion* of URLs throughout DVD titles such that URLs can be selected as they appear in the data stream (i.e. on-the-fly). The present Application *concentrates* URLs into the TXTDT_MG structure and uses indices to select appropriate URLs.

The on-the-fly approach renders it impractical for Kanazawa to concentrate URLs into a table or structure because each URL would have to be collected sequentially and cross-referenced prior to playback of the DVD. Thus, the alteration of Kanazawa to attain structural similarity with the claims of the present Application would produce a Kanazawa device that is unsatisfactory for its intended purpose. Therefore, there could have been no suggestion or motivation to make the modifications proposed by the Examiner. Consequently, the claim rejections should be reversed.

The Cited Art Does Not Render Obvious Using A GPRM To Index A TXTDT_MG Data Structure

The Examiner has not established *prima facie* obviousness with regard to using information in a GPRM to index the DVD Text Data Structure recited in the claims (including the TXTDT_MG data structure recited in claims 1, 3-4, 6-9, 11 and 12). Structural similarity between claimed and prior art subject matter, proved by combining references or otherwise, where the prior art gives reason or motivation to make the claimed compositions, creates a *prima facie* case of obviousness. *In re Dillon*, 16 U.S.P.Q. 2d at 1901. Appellants respectfully submit that no structural similarity exists between the claimed and prior art.

In rejecting the claims, the Examiner relies on an unsupported conclusion that the cited art renders obvious the use of a DVD Text Data Structure for storing URLs. This conclusion has been addressed above. However, even allowing *arguendo*, that Kanazawa and Watkins could be said to render obvious storing URLs in a DVD Text Data Structure, nothing in the cited art would have motivated a skilled artisan to use information in a GPRM register to index the DVD Text Data Structure. Nevertheless, the Examiner proposes that:

...it would have been [obvious] to those skilled in the art at the time of the invention to utilize GPRM register and the set command to store, indicia data, representing a playback position, as taught by Watkins, as Kanazawa already does store the position to resume with and to store the URL text type data, in accord to the teaching of storing, text information with respect to the a text data manager (TXTDT- M G) area, being known in the art, as URLs are text data.

Office Action mailed December 1, 2005, page 3, paragraph commencing at line 25. The Examiner apparently contends that Watkins would have enabled those skilled in the art to set indicia of a playback position in a GPRM register using a set command and that it would have been obvious to a skilled artisan to use GPRMs to index into the DVD Text Data Structure because Kanazawa stores a resume position as well as a text URL. Appellants respectfully submit that the Examiner's conclusion cannot be justified as argued.

Neither Kanazawa nor Watkins explicitly or impliedly teaches storing URLs in a data structure of any kind. Further, Watkins is wholly uninformative regarding playback of a DVD and provides no motivation to augment the teachings of Kanazawa in any manner that might lead to the presently claimed invention. Watkins does not teach writing indicia of a current position of play within the DVD into one or more GPRMs as required by the claims. Watkins merely describes certain navigation commands provided by the well-known DVD Standard, including:

“Set instructions are used to calculate general parameter values.” Watkins, col. 9, lines 25-38. As cited by the Examiner, Watkins describes an example program in which various instructions cause an assembler to generate a bitstream profile that can “describe, edit, and generate multimedia bitstreams.” Watkins, Abstract, col. 10, lines 46-67. Thus, Watkins is directed to the *creation of*, rather than *playback of*, bitstreams and consequently nothing in Watkins would have motivated a skilled artisan to modify Kanazawa to use a DVD Standard “Set” instruction for any purpose related to playback.

Moreover, Watkins is entirely silent regarding URLs, HTML and text data. Watkins is also silent regarding current position of play and Watkins could not have motivated a skilled artisan to modify Kanazawa to index a data structure containing URLs using indicia of a current position of play within the DVD that had been written into one or more GPRMs. Indeed, the Examiner concedes that “Kanazawa already does store the position to resume with.” Office Action mailed December 1, 2005, page 3, paragraph commencing at line 25. If the Examiner is correct, then Kanazawa would not have been improved by combination with Watkins since the skilled artisan would have already been apprised by the DVD Standard of the “Set” instruction and the existence of GPRMs and would have observed that Kanazawa already stores a “position to resume.” Thus no beneficial outcome could be expected from combining Kanazawa and Watkins.

Therefore, no combination of Kanazawa nor Watkins can be said to render obvious writing indicia of a current position of play within the DVD into one or more GPRMs or using the GPRM to index a TXTDT_MG Data Structure. Consequently, the rejection should be reversed.

The Cited Art Does Not Render Obvious A DVD Text Data parser

Kanazawa does not teach a DVD Text Data parser. In rejecting the claims, the Examiner remarks that the Appellants have “never argued to identify, why the prior art does not have a text parser.” Office Action mailed May 17, 2006, page 2, paragraph commencing at line 15. In this regard, the Examiner is correct. The Appellants have argued that the prior art does not teach a *DVD Text Data* parser. This DVD Text Data parser is well-defined in the claims and it is respectfully submitted that the Examiner’s rejection relies on an unreasonable and improper mischaracterization of claim elements or, at the very least, that insufficient structural similarity exists between the claimed DVD Text Data parser and Kanazawa’s alleged text parser to support a §103 rejection.

A DVD Text Data parser is recited claims 3, 9, 13 and 16. The parser recited in claim 3 is further referenced, described or limited in claims 7 and 8. The parser recited in claim 16 is further referenced, described or limited in claim 19. Appellants further submit that no structural similarity exists between the claimed DVD Text Data parser and the text parser alleged by the Examiner to be taught by Kanazawa and, moreover, absent an impermissible use of hindsight, no reason or motivation could have existed to modify the alleged text parser of Kanazawa to obtain a DVD Text Data parser.

The Examiner alleges the existence of a text parser in Fig. 16 of Kanazawa because navigation manager 201 is shown as producing a URL and, according to the Examiner, “the navigation manger 201, being software, deriving or extracting or de-multiplexing a URL, as clearly shown, is a text parser because a text parser is ... a software tool that parsers text.” Office Action mailed May 17, 2006, page 2, paragraph commencing at line 17. However, the claims of the present Application require a DVD Text Data parser that is used to parse a *DVD Text Data Structure* and that the DVD Text Data Structure includes indexable URLs. Thus, while the Examiner’s text parser may be able to extract a URL from a datastream, nothing in Kanazawa permits an inference or suggestion that Kanazawa’s alleged text parser could be structurally similar to the presently claimed DVD Text Data parser or that Kanazawa’s alleged text parser performs the manner required by the claims.

For example, claim 3 of the present application requires using a DVD Text Data parser and indicia of a current position of play within the DVD to index into a DVD Text Data Structure to obtain a URL, wherein the indicia are written into one or more GPRMs.

Kanazawa's alleged text parser does not teach or suggest using indicia of a current position of play for indexing a DVD Text Data Structure. At most, Kanazawa's alleged text parser parses a one-dimensional text string in the form of a URL. Further, Kanazawa's alleged text parser is not called by an event script in response to a button number message as is required of the DVD Text Data parser in claim 7. Furthermore, the DVD Text Data parser recited in claim 8 is for receiving a DVD Text Data Structure upon initialization of the DVD and is further for using a button number message to index into the DVD Text Data Structure. As discussed above, Kanazawa systems adopt an on-the-fly approach in which URLs are encountered during playback of a DVD title. Nothing in Kanazawa would support an allegation that Kanazawa teaches or suggests a text parser of any kind that receives a DVD Text Data Structure upon initialization of the DVD.

Similarly, Claim 9 of the present Application requires a DVD Text Data parser for receiving DVD-generated information and parsing a TXTDT_MG data structure in the information to derive data containing a Universal Resource Locator (URL) therefrom. Nothing in Kanazawa teaches or suggests such a DVD Text Data parser.

Similarly, Claim 13 of the present Application requires a DVD Text Data parser for parsing a DVD Text Data Structure based on content of a GPRM to derive a Universal Resource Locators (URL) therefrom, wherein indicia of a current position of play within the DVD are written into the GPRM. Nothing in Kanazawa teaches or suggests such a DVD Text Data parser.

Similarly, Claim 16 of the present Application requires a DVD Text Data parser for deriving a data structure from DVD-generated information and, based on the content of a GPRM, parsing the information to derive a plurality of URLs therefrom, wherein indicia of a current position of play within the DVD are written into the GPRM. Furthermore, claim 19 requires that the DVD Text Data parser of claim 16 uses positional playback data to index into a DVD Text Data Structure to obtain a selected URL from the plurality of URLs. Nothing in Kanazawa teaches or suggests the DVD Text Data parser of claims 16 or 19.

CONCLUSION

For the foregoing reasons, Appellants respectfully request that all the pending claims be deemed allowable by this honorable Board.

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APPENDIX: CLAIMS

1. A system for generating information representative of the contents of a DVD, the DVD having been authored such that the information includes embedded commands to populate one or more General DVD Parameter Registers (GPRMs), the system comprising:

a DVD unit for playing the DVD and generating information representative of the contents of a DVD and, upon receiving a certain command embedded in the information, writing indicia of a current position of play within the DVD into the one or more GPRMs;

a media unit adapted to receive the information and extract a TXTDT_MG data structure associated with the DVD, and further adapted to display video content extracted from the information; and

a browser for displaying content designated by Universal Resource Locators (URLs), the URLs being derived by using the GPRMs to index into the TXTDT_MG data structure.

2. (Cancelled)

3. The system of claim 1, wherein URLs are derived using a DVD Text Data parser and the indicia to index into the DVD Text Data Structure to obtain the URL.

4. The system of claim 1, wherein the content designated by the URL is HTML-coded.

5. The system of claim 1, wherein the content designated by the URL is streaming media content.

6. The system of claim 3, wherein:

the media player is for displaying a menu button specified by the information from the DVD, the menu button being associated with the URL, the association between the menu button and the URL being responsive to the positional playback data in the GPRMs; and

the browser is for displaying the content specified by the URL responsive to user actuation of the menu button.

7. The system of claim 6, wherein

the media player is for generating a button number message responsive to the user actuation of the menu button, the system further comprising an event script for receiving the message and responsive thereto calling the DVD Text Data parser.

8. The system of claim 6, wherein:

the DVD Text Data parser is further for receiving a DVD Text Data Structure from the DVD each time the DVD is initialized, the DVD Text Data Structure including the URLs; and

the DVD Text Data parser is for using the button number message to index into the DVD Text Data Structure to obtain the URLs.

9. A system for generating information representative of the contents of a DVD, the DVD having been authored such that the information includes embedded commands to populate a plurality of elements of a General DVD Parameter Register (GPRM) with positional playback data, the system comprising:

a DVD unit for playing the DVD and generating the information and, upon receiving a certain embedded command, writing indicia of a current position of play within the DVD into the GPRM;

a DVD Text Data parser for receiving the information and parsing a TXTDT_MG data structure in the information to derive data containing a Universal Resource Locator (URL) therefrom;

a browser for displaying a hyperlink corresponding to the URL and, responsive to actuation thereof, content designated by the URL; and

a media player adapted for receiving the information, extracting video content from the information, and displaying the video content.

10. (Cancelled)

11. The system of claim 9, wherein the content designated by the URL is HTML-coded.

12. The system of claim 9, wherein the content specified by the URL is streaming media content.

13. A system for generating information representative of the contents of a DVD, the DVD having been authored such that the information includes embedded commands to populate a plurality of elements of a General DVD Parameter Registers (GPRM) with positional playback data, the system comprising:

- a DVD unit for playing the DVD and generating the information and, upon receiving a certain embedded command, writing indicia of a current position of play within the DVD into the GPRM;

- a DVD Text Data parser for parsing a DVD Text Data Structure based on content of the GPRM to derive a Universal Resource Locators (URL) therefrom;

- a browser for displaying a hyperlink corresponding to the URL and, responsive to actuation thereof, for displaying content designated by the URL; and

- a media player adapted for receiving the information, extracting the DVD Text Data Structure from the information, extracting video content from the information, and displaying the video content, the video content including a button associated with the URL;

- wherein the browser is further for displaying content designated by the URL responsive to an actuation of the button.

14. The system of claim 13, wherein the information from the DVD includes positional information associated with the URL.

15. The system of claim 14, wherein the positional information indicates a position of the button within the DVD content.

16. A system for generating information representative of the contents of a DVD, the DVD having been authored such that the information includes embedded commands to populate a plurality of elements of a General DVD Parameter Registers (GPRM) associated with the DVD with positional playback data, the system comprising:

a DVD unit for playing the DVD and generating the information and, upon receiving a certain embedded command, writing indicia of a current position of play within the DVD into the GPRM;

a DVD Text Data parser for deriving a data structure from the information and, based on the content of the GPRM, parsing the information to derive a plurality of URLs therefrom; a browser for displaying content designated by any one of the plurality of URLs, wherein the browser displays content upon actuation of the any one URL; and

a media player adapted for receiving the information, extracting video content from the information, and displaying the video content, the media player being further adapted to display a plurality of buttons, wherein each button is associated with at least one of the plurality of URLs, the association between the each button and the at least one URL being responsive to the positional playback data in the GPRM.

17. (Canceled)

18. (Canceled)

19. The system of claim 16, wherein:

the information includes a DVD Text Data Structure; and

the DVD Text Data parser uses the positional playback data to index into the DVD Text Data Structure to obtain a selected URL from the plurality of URLs.

20. The system of claim 16, wherein the browser displays the designated content designated at the same time as the media player displays video content.

21. The system of claim 16, wherein the browser is further for displaying a hyperlink corresponding to the any one URL.

APPENDIX: EVIDENCE

None.

APPENDIX: RELATED PROCEEDINGS

None.